

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A reversible self-cleaning window assembly comprising:
 - a) a reversible frame assembly including a window sash adjoined to an outer frame by one or more pivoting devices; and
 - b) a substrate retained by the window sash including an exterior face and an interior face, wherein one or more photoeatalytic layers are applied to the substrate bears a photocatalytic coating on both the exterior face and interior face.
2. (Original) The reversible self-cleaning window assembly according to claim 1, wherein the substrate is a glass pane.
3. (Original) The reversible self-cleaning window assembly according to claim 1, wherein the substrate is an insulated glass unit.
4. (Currently Amended) The reversible self-cleaning window assembly according to claim 1, wherein the photocatalytic coating includes a layer comprising layer comprises an oxide of a metal selected from the group consisting of titanium, iron, silver, copper, tungsten, aluminum, zinc, strontium, palladium, gold, platinum, nickel, and cobalt.
5. (Original) The reversible self-cleaning window assembly according to claim 4, wherein said metal oxide comprises titania.
6. (Currently Amended) A reversible self-cleaning window assembly comprising:
 - a) a transparent substrate having generally opposed first and second faces, wherein the substrate bears a functional coating on both the first and second faces, each face bearing a functional coating, the said functional coating comprising a photocatalytic material adapted to

chemically degrade organic contaminant that accumulates on the first or second face of said substrate when exposed to ultraviolet radiation; and

b) an outer frame operably adjoined to a sash, said sash supporting the substrate, and wherein the outer frame and sash are configured to allow the substrate to be selectively oriented in a primary orientation or secondary orientation, the primary orientation characterized in that said first face is exposed to a high ultraviolet radiation environment and said second face is exposed to a low ultraviolet radiation environment, the secondary orientation characterized in that said second face is exposed to said high ultraviolet radiation environment while said first face is exposed to said low ultraviolet radiation environment.

7. (Original) The reversible self-cleaning window assembly according to claim 6, wherein the transparent substrate is glass.

8. (Original) The reversible self-cleaning window assembly according to claim 6, wherein the transparent substrate is an insulated glass unit.

9. (Original) The reversible self-cleaning window assembly according to claim 6, wherein the sash is configured such that when the transparent substrate is secured in the outer frame, it can be removed and resecured in either the primary or the secondary orientation.

10. (Original) The reversible self-cleaning window assembly according to claim 6, wherein the window assembly includes a pivot device about which the transparent substrate can be rotated between the primary and secondary orientation.

11. (Original) The reversible self-cleaning window assembly according to claim 6, wherein the photocatalytic material comprises sputtered material.

12. (Currently Amended) The reversible self-cleaning window assembly according to claim 11, wherein the photocatalytic material layer comprises sputtered material having a substantially uniform thickness over the first face and second face of the substrate.

13. (Original) The reversible self-cleaning window assembly according to claim 6, wherein said photocatalytic material comprises an oxide of a metal selected from the group consisting of titanium, iron, silver, copper, tungsten, aluminum, zinc, strontium, palladium, gold, platinum, nickel, and cobalt.

14. (Original) The reversible self-cleaning window assembly according to claim 13, wherein said metal oxide comprises titania.

Claims 15-22 (Canceled).